National Institute of Environmental Health Sciences

Zoonosis emergence linked to agricultural intensification and environmental change

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Abstract:

A systematic review was conducted by a multidisciplinary team to analyze qualitatively best available scientific evidence on the effect of agricultural intensification and environmental changes on the risk of zoonoses for which there are epidemiological interactions between wildlife and livestock. The study found several examples in which agricultural intensification and/or environmental change were associated with an increased risk of zoonotic disease emergence, driven by the impact of an expanding human population and changing human behavior on the environment. We conclude that the rate of future zoonotic disease emergence or reemergence will be closely linked to the evolution of the agriculture-environment nexus. However, available research inadequately addresses the complexity and interrelatedness of environmental, biological, economic, and social dimensions of zoonotic pathogen emergence, which significantly limits our ability to predict, prevent, and respond to zoonotic disease emergence.

Source: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3666729

Resource Description

Exposure :

weather or climate related pathway by which climate change affects health

Ecosystem Changes, Human Conflict/Displacement

Geographic Feature:

resource focuses on specific type of geography

None or Unspecified

Geographic Location:

resource focuses on specific location

Global or Unspecified

Health Impact:

specification of health effect or disease related to climate change exposure

Infectious Disease

Infectious Disease: Airborne Disease, Zoonotic Disease

Airborne Disease: Influenza

Zoonotic Disease: General Zoonotic Disease, Nipah Virus

Resource Type:

format or standard characteristic of resource

Review

Timescale:

time period studied

Time Scale Unspecified